

Ver. 1.0

**XNET**  
**(IVC5055VR)**  
**User Manual**



## About this Manual

A compatibility and durability test ensures this product's high performance.

This manual is for XNET Network product users only, and it describes operations related to XNET Network products.

Please read this manual thoroughly paying attention to cautions and warnings before using the product even if you have used similar products before.

## Important Notices

- The copyright of this manual is owned by CNB Technology Inc.
- It is illegal to copy and distribute this manual without permission.
- Damages caused by misuse and by use of parts not recommended will not be applicable for support.
- Contact the store or the manufacturer immediately if (you think) there is any problem with the product.
- Contact the store or the manufacturer before disassembling the product for alteration or repair.
- XNET is a trademark of CNB Technology Inc.
- This product complies for CE (Europe) and FCC (USA) regulations for industrial/home-use electrical device.

## Appendix



**[Warning]** This symbol provides a caution for handling XNET network cameras.



**[Note]** This symbol provides a useful tip for handling XNET network cameras.

## Index

<b>1. System Administration .....</b>	<b>5</b>
1.1. Logging On.....	5
1.1.1. Using Internet Explorer .....	5
1.1.2. ID and Password .....	5
1.2. Configuring Camera .....	7
1.3. Web Viewer (Index.html) .....	9
1.4. Status Window.....	11
1.5. Configuring Users.....	12
1.6. Setting Date &Time .....	14
1.7. Maintaining Server Configurations .....	16
1.8. System / Log .....	18
1.9. Configuring Audio .....	20
1.10. Configuring Video .....	21
1.11. Configuring RTP .....	23
1.12. Camera Conditions.....	25
1.13. Configuring TCP/IP parameters .....	27
1.14. Configuring IP Filtering .....	29
1.15. Configuring HTTP.....	31
1.16. Configuring UPnP/DynDNS/Bonjour .....	33
1.17. Configuring CMS .....	35
1.18. Configuring Event Type .....	36
1.19. Configuring Motion Detection area.....	38
1.20. Configuring Sensor/Alarm .....	40
1.21. SMTP Setup .....	42
1.22. Configuring FTP .....	44

# 1. System Administration

## 1.1. Logging On

You can log on as an administrator using either Internet browser or 'CMS' software. (This manual will describe about using Internet browser only.)

### 1.1.1. Using Internet Explorer

Type the [IP Address of the XNET product](#) in the address bar and press enter.

e.g.) : **<http://192.168.123.100>**

If the HTTP port has been changed from the default value, enter the new port as shown below:

[IP Address of the XNET: Port No.](#)

e.g.) : **<http://192.168.123.100:8080>**

### 1.1.2. ID and Password

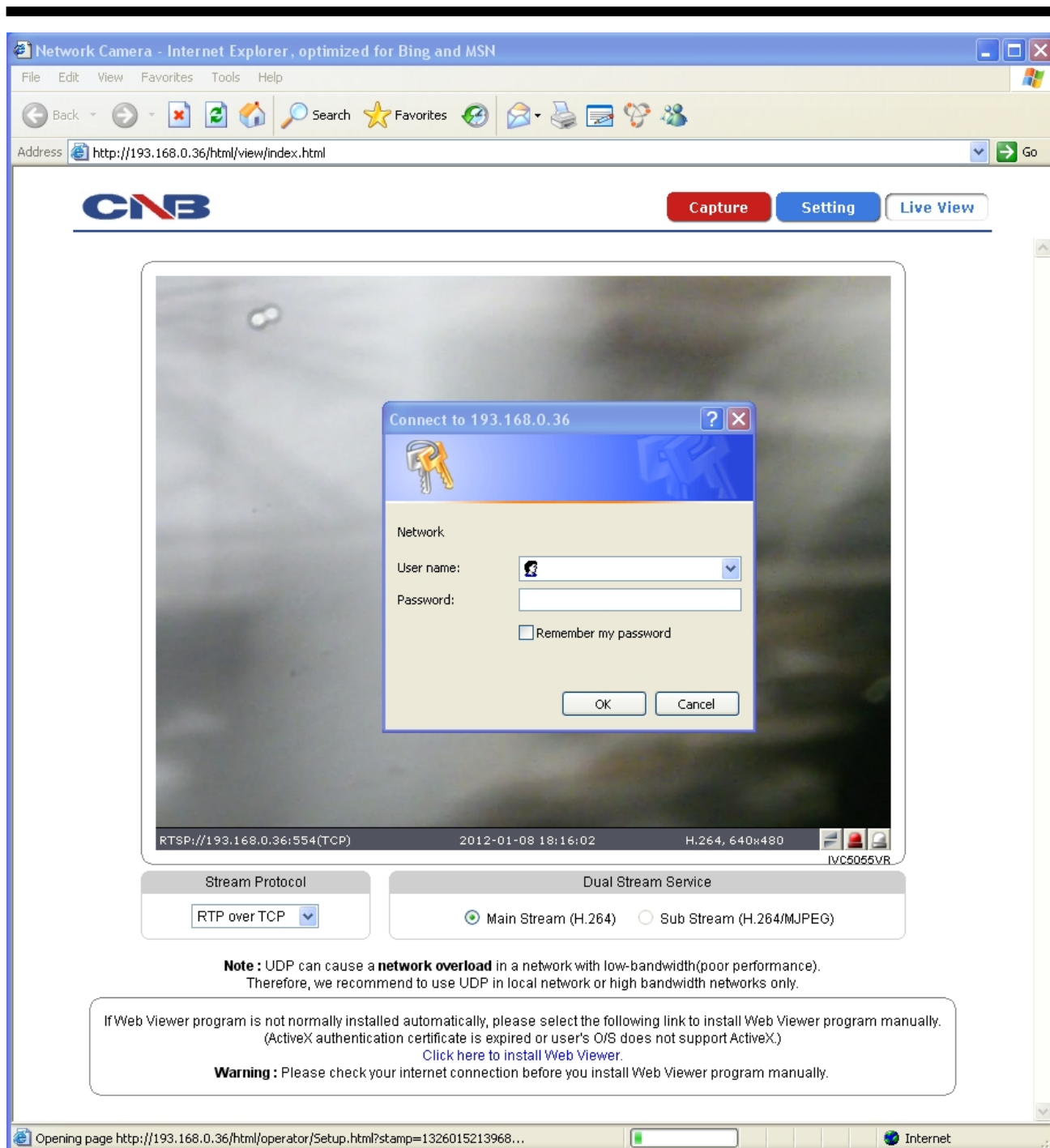
If you are logging in as an administrator, the Log-In box will appear as shown in figure 1-1. Basic Setup page will appear when you enter id and password.



Enabling 『Enable anonymous viewing』 option at Users setup page allows users to monitoring Live view without a log-in prompt, however, accessing to other menu requires a log-in prompt. Please refer to 『1.5. Configuring Users』 for more details.



Once user login to network camera through Internet Explorer, it won't ask user to login again until username or password is modified. Thus, please close Network camera's Internet Explorer window for security after monitoring live view or modifying its setting values.



**Figure 1-1 Log-in window**

The default user name and password is "**root**" and "**admin**" respectively.



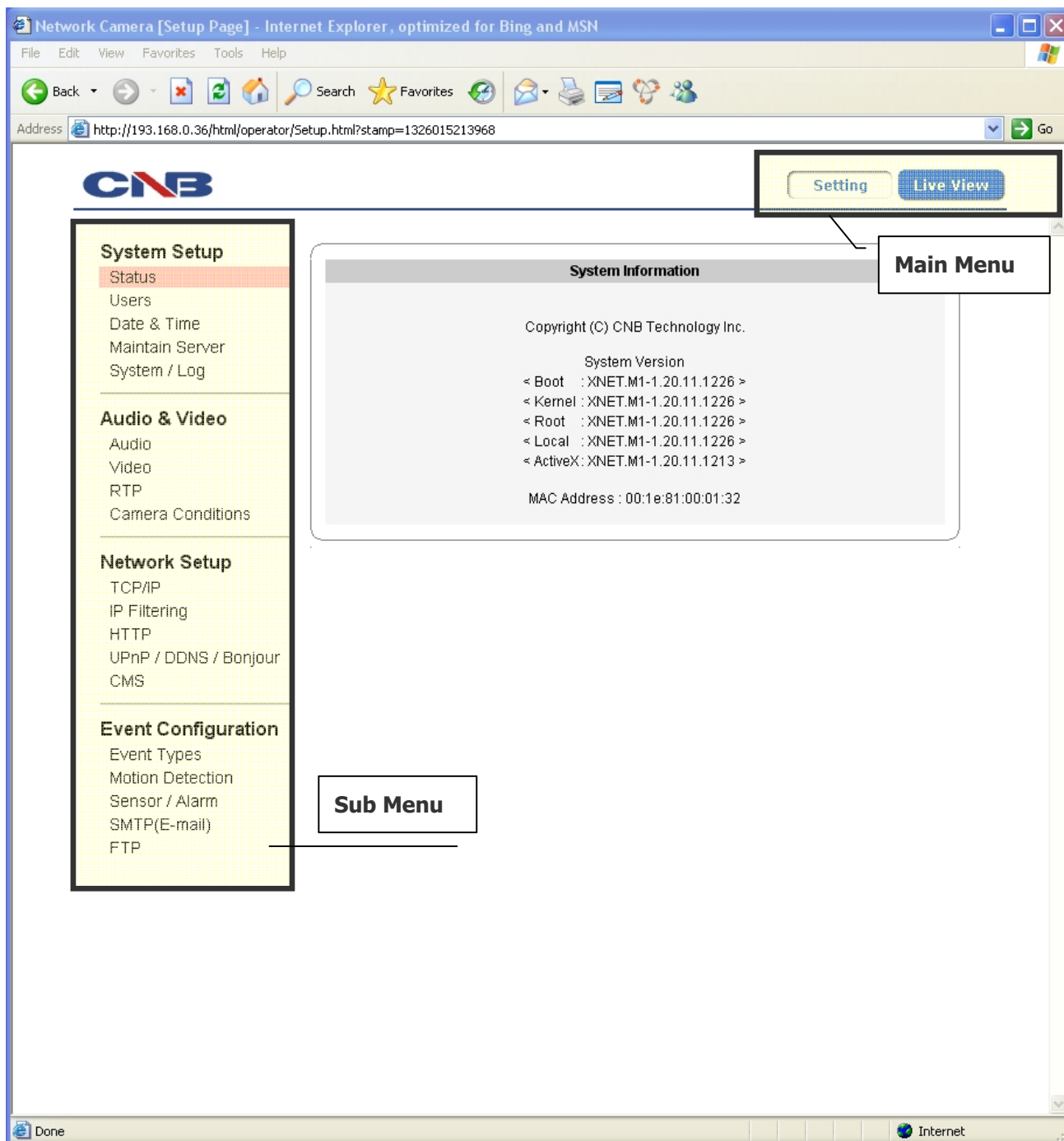
For security purpose, it is recommended to change the administrator's id and password from their default values. Please be careful not to forget them or expose them to others. Please refer to [1.5] for detail.



If you forget the administrator's password, "Factory Reset" is the only way to regain access. However, since this will retrieve all default settings, you need to configure the network settings using IP installer software again.

## 1.2. Configuring Camera

When you log in as an administrator, XNET's Basic Setup page will appear as shown in Figure 1-2. Setup pages for different features can be accessed from this page. Access to each feature is controlled by different user groups (Administrator, Operator, and Viewer.)



**Figure 1-2 Basic Setup Page**



Basic Setup Page can be accessed from Operator group level and up. If you want to access Administrator level page in this user level, you need to log in as Administrator. Please refer to the following table for access authority:

● Accessible

— Not Accessible

Function	Access		
	Administrator	Operator	Viewer
Index Page	●	●	●
Users Setup Page	●	—	—
Date&Time Setup Page	●	●	—
Maintain Server Setup Page	●	—	—
System / Log Setup Page	●	—	—
Audio Setup Page	●	●	—
Video Setup Page	●	●	—
RTP Setup Page	●	●	—
Camera Condition Setup Page	●	●	—
TCP / IP Setup Page	●	—	—
IP Filtering Setup Page	●	—	—
HTTP Setup Page	●	—	—
UPnP / DynDNS / BJR Setup Page	●	—	—
CMS Setup Page	●	—	—
Event Type Setup Page	●	●	—
Motion Detection Setup Page	●	●	—
Sensor / Alarm Setup Page	●	●	—
SMTP Setup Page	●	●	—
FTP Setup Page	●	●	—

**[Diagram 1-1] User Access Authority**



### 1.3. Web Viewer (Index.html)

When you access an XNET product, Web Viewer page will appear automatically. Viewer area displays the video output from the camera, and menu bar contains taps that lead to each feature setting page.

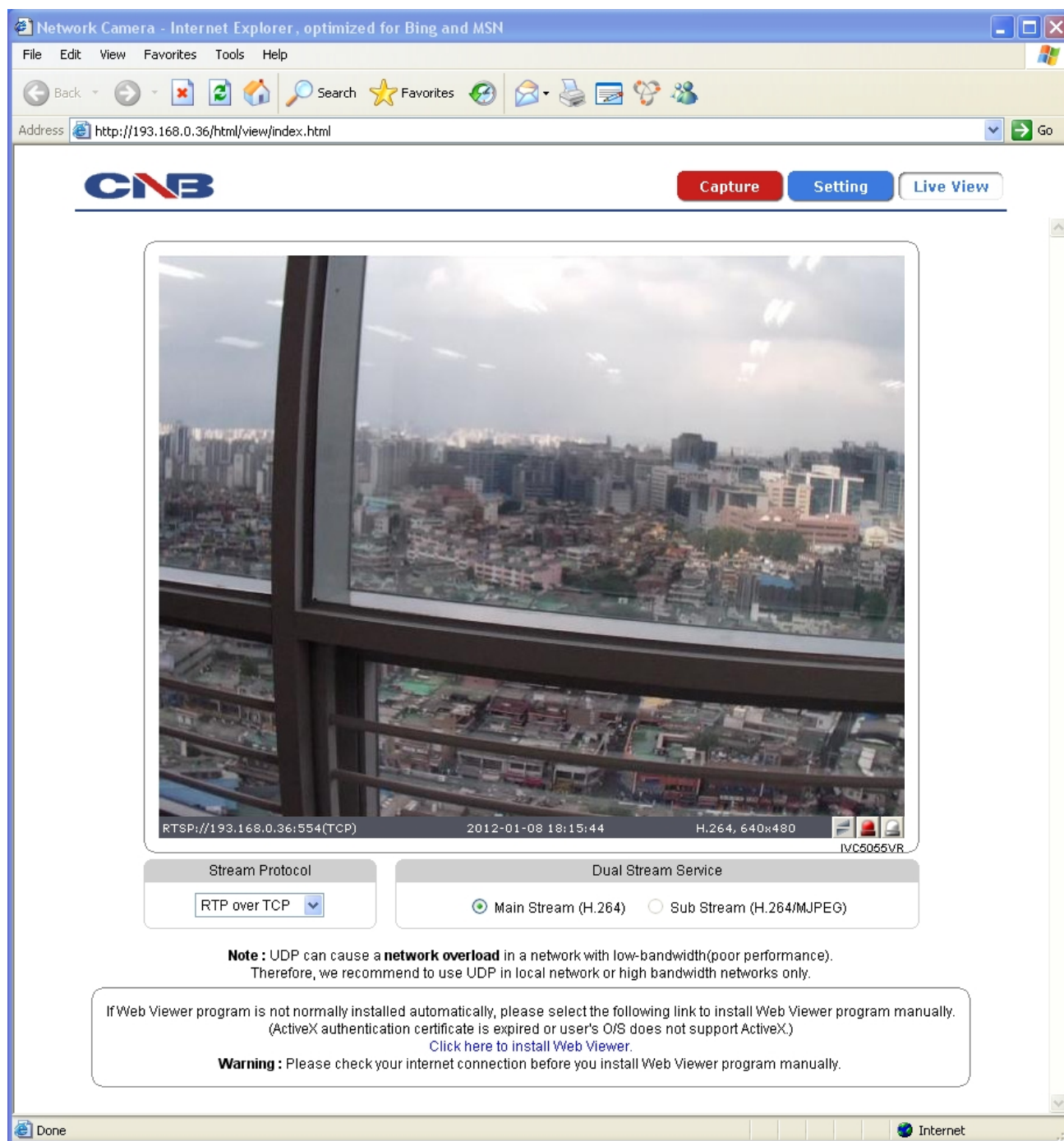


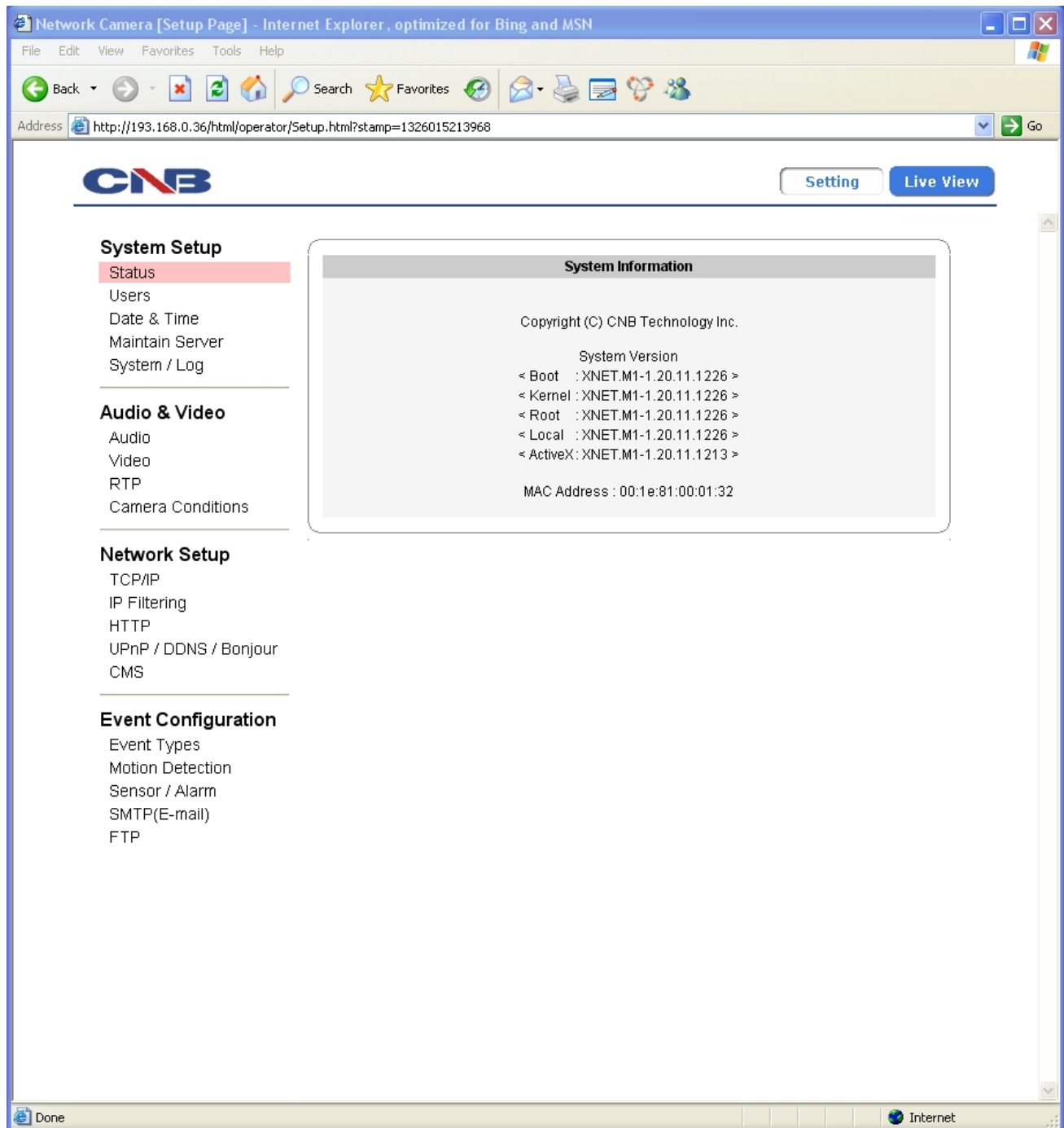
Figure 1-73 Web Viewer Page

ITEM		DESCRIPTION
Capture	-	Captures the still image and displays on a pop-up window. [Save to] c:\WxNetCapture
Setting	-	Opens up Basic Setup Page. Setup page for each XNET feature can be opened from this Menu screen. (Please refer to 1.4 for detail)
Live View	-	Open up Motion Index View page. Index View Page will display Video as well as setting up Stream Protocol (TCP / UDP) and Codec (when using Dual Stream).
Stream Protocol	-	A Stream Protocol can be selected when selecting EditBox (RTP over TCP/RTP over UDP)
Dual Stream Service	Main Stream	When this box is checked, Main Stream Video is displayed.
	Sub Stream	When this box is checked, Sub Stream Video is displayed. (H.264/MJPEG) Dual-Codec needs to be enabled in Video Setup Page in order for Sub Stream Video to be displayed. (Please refer to 1.10 for detail)

## 1.4. Status Window

Status page displays XNET System's Version and its Ethernet address.

Click [**► Status**] button to open the page shown in Figure 1-4.



**Figure 1-4 Status Page (Internet Explorer 6.0)**

## 1.5. Configuring Users

This can give or limit authority to users for controlling Video and other features of XNET system.

Click [**► Users**] button to open the page shown in Figure 1-5.

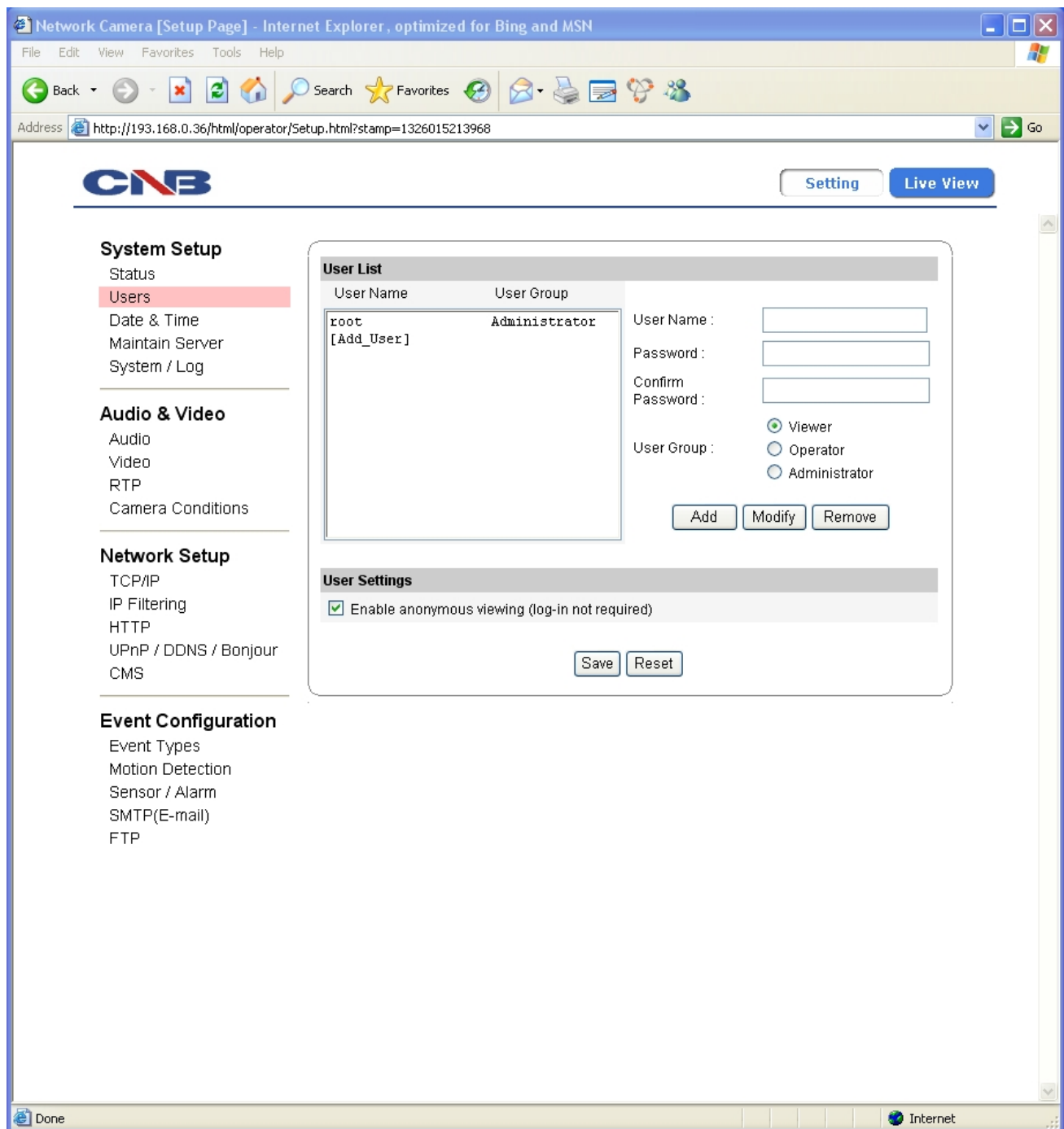


Figure 1-5 Users Configuration Page

ITEM		DESCRIPTION						
User List	-	Displays list of registered users. "root" is the system's administrator. "root" cannot be added or deleted. Only the password for "root" can be changed.						
Add	-	<p>This adds a new user. Select "[Add_User]" tap in User List Box. To add a new user, enter User name, Password, and User group then click Add button.</p> <p>Updated User list can be viewed in User List Box.</p> <ul style="list-style-type: none"><li>- Up to 10 users can be added.</li><li>- Authority of different User Groups</li><li>- 『User name』 must start with alphabet and its length must be from 1 to 16.</li><li>- 『Password』 length must be from 1 to 14.</li></ul> <table><tr><td>Administrator</td><td>Full control of the XNET system.</td></tr><tr><td>Operator</td><td>Refer to [Diagram 1-1]</td></tr><tr><td>Viewer</td><td>view camera's video signal only.</td></tr></table>	Administrator	Full control of the XNET system.	Operator	Refer to [Diagram 1-1]	Viewer	view camera's video signal only.
Administrator	Full control of the XNET system.							
Operator	Refer to [Diagram 1-1]							
Viewer	view camera's video signal only.							
Modify	-	Modifies information for each user. Select a user in User Listbox, enter new Password/ User Group, and click modify button to save the changes. Updated detail can be viewed in User List Box.						
Remove	-	Removes a user. Select a user in User Listbox and click remove button to remove. Updated user list can be viewed in User List Box.						
User Settings	Enable anonymous viewing	Turns Anonymous Viewer mode on or off. When enabled, Web Viewer can be accessed without a log-in prompt.						
Save	-	Applies and saves the configurations						
Reset	-	Recalls previously saved configurations.						



Please disable 『Enable anonymous viewing』 function if resisted users at 『User List』 only want to monitor network camera's live view.

## 1.6. Setting Date & Time

This page will change Date and Time of XNET system.

Click [**► Date & Time**] to open the page shown in Figure 1-6.

The screenshot shows the 'Network Camera [Setup Page]' in Internet Explorer. The address bar shows 'http://193.168.0.36/html/operator/Setup.html?stamp=1326015213968'. The page has a 'CNB' logo and two buttons: 'Setting' and 'Live View'. On the left, there is a sidebar menu with sections: 'System Setup' (Status, Users, Date & Time, Maintain Server, System / Log), 'Audio & Video' (Audio, Video, RTP, Camera Conditions), 'Network Setup' (TCP/IP, IP Filtering, HTTP, UPnP / DDNS / Bonjour, CMS), and 'Event Configuration' (Event Types, Motion Detection, Sensor / Alarm, SMTP(E-mail), FTP). The 'Date & Time' option is highlighted. The main content area is titled 'Current Server Time' and shows 'Date/ 2012-01-08' and 'Time/ 18:16:27'. Below this is the 'New Server Time' section. It includes a 'TimeZone' dropdown set to 'GMT+09 (Seoul, Osaka, Tokyo)', an unchecked checkbox for 'Automatically Adjust for Daylight Saving Time Changes', and a 'TimeMode' section. The 'TimeMode' section has three radio buttons: 'Synchronize with computer time' (selected), 'Synchronize with NTP server : time.nist.gov', and 'Set Manually'. The 'Synchronize with NTP server' option has a 'Sync interval' of 'Only Once' (selected) and options for '1 day' and '1 week'. The 'Set Manually' option has 'Date' and 'Time' input fields. The 'Not Change' option is also present. At the bottom of the 'New Server Time' section are 'Save' and 'Reset' buttons.

Figure 1-6 Date and Time Page

ITEM		DESCRIPTION	
Current Server Time	-	Displays time of XNET system.	
New Server Time	Time Zone	Selects Time Zone.   <Default : GMT+09>	
	Automatically Adjust for Daylight Saving Time Changes	Enables/ Disables Daylight Saving time.	
	Time Mode	Sets Date and Time of the Server.  『Synchronize with computer time』 - Synchronizes time and date of Client PC to Server.  『Synchronize with NTP server』 - Synchronizes server's time and date to NTP Server. (Enter NTP Server address in Network Setup Page) - Set NTP Server update period	
		one	No update periodically
		1 day	Once a day
		1 week	Once a week
『Set Manually』 - Set date and time of Server manually.  『None』 - Do not modify Server Date and Time			
Save	-	Applies and saves the configurations	
Reset	-	Recalls previously saved configurations.	

## 1.7. Maintaining Server Configurations

This page configures system parameters such as system restart, factory default settings, system upgrade, saving configurations, saving images, and other additional features.

Click [**▷ Maintain Server**] to open the page shown in Figure 1-7.

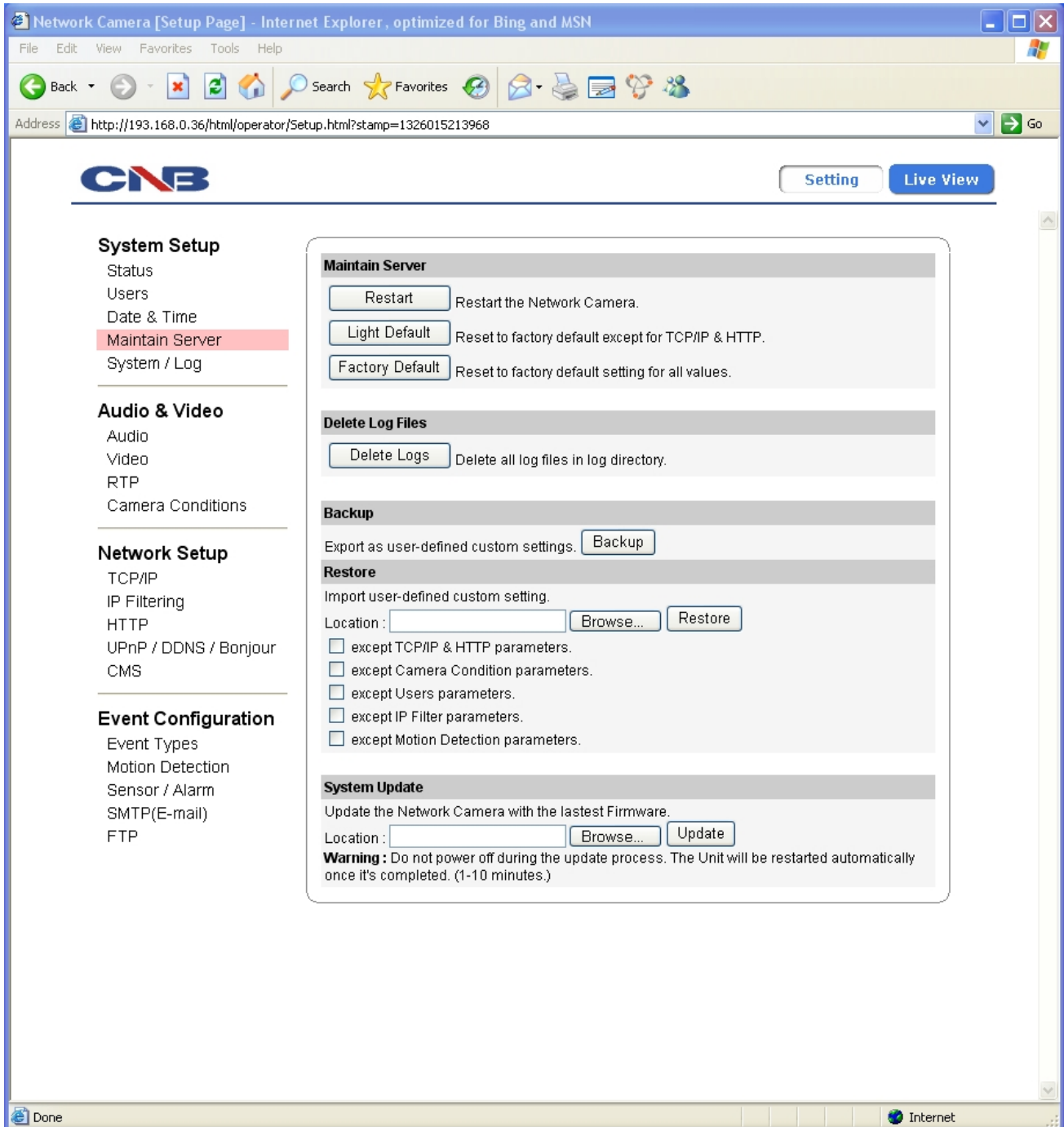



Figure 1-7 Server Maintenance Page

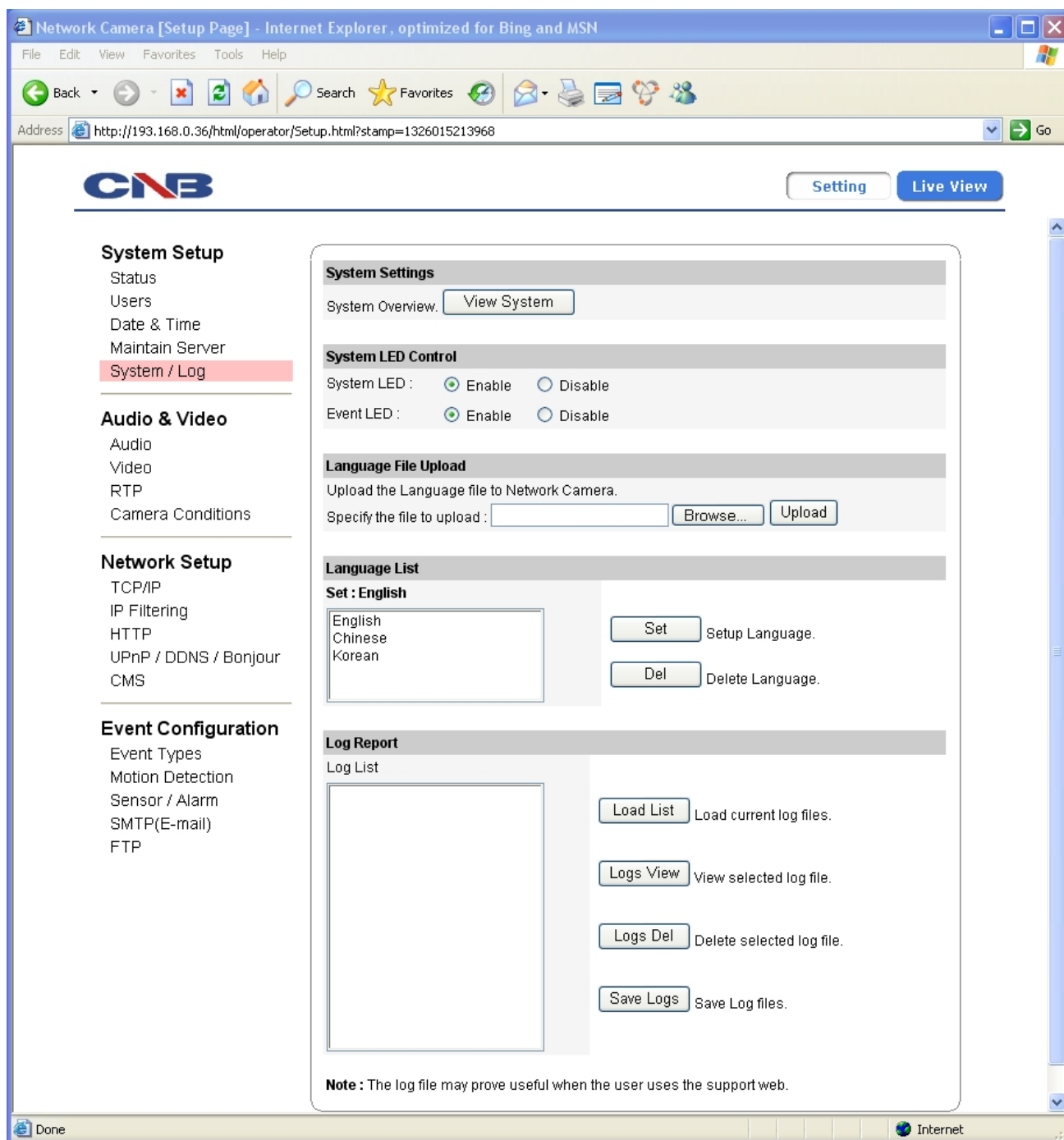


ITEM		DESCRIPTION
<b>Maintain Server</b>	Restart	Restarts the system. It takes about 45 seconds.
	Light Default	Resets all parameters except for TCP/IP settings. This restore will be followed by a 45 seconds system reset.
	Factory Default	Resets all parameters to Factory Default setting. This will be followed by a 45 seconds system restart.
<b>Delete Log Files</b>	Delete Logs	Delete all saved Log Messages.
<b>Backup</b>	Backup	This saves current camera's configurations to Client PC as a file (xnetconfig.dat). Back up file can be restored to other XNET cameras. This will be followed by a 45 seconds system reset.
<b>Restore</b>	Restore	This loads up settings from a saved Backup file. Click restore button after selecting backup files in Client PC. Optional check boxes can be used to select settings to be excluded from the restore process. <div> <div>『except TCP/IP &amp; HTTP parameters』</div> <div>『except Camera Condition parameters』</div> <div>『except Users parameters』</div> <div>『except IP Filter parameters』</div> <div>『except Motion Detection parameters』</div> </div> This will be followed by a one-minute system reset.
<b>System Update</b>	Update	Use this to update the system. Select location of Update file in Client PC and click Update button.  This will be followed by one-minute system restart. Upgrade File can be downloaded from <a href="http://www.cnbtec.com">http://www.cnbtec.com</a> <div>  Please do not disconnect power and LAN cable from the XNET while the upgrade is in process. It might cause a system error. </div>

## 1.8. System / Log

System / Log page provides network camera's configuration, language, and error information to users.

Click [**System / Log**] button to open the page shown in Figure 1-8.



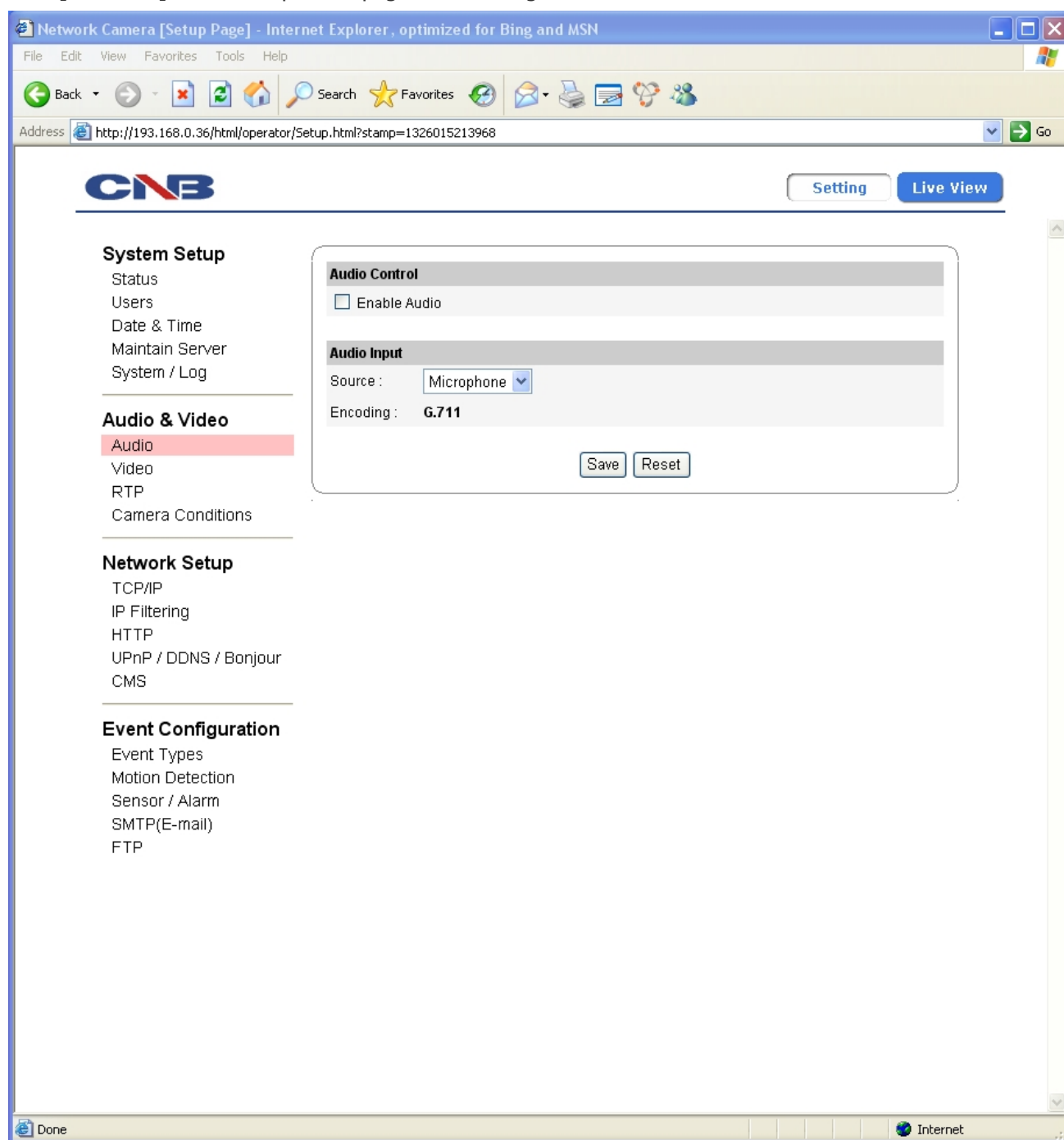
**Figure 1-8 System / Log Page**

ITEM		DESCRIPTION
<b>System Settings</b>	System Overview	Displays current configurations for XNet option pages.
<b>System LED Control</b>	System LED	Enable / Disable System LED.
	Event LED	Enable / Disable Event LED.
<b>Language File Upload</b>	-	Upload language files. Language File can be downloaded from <a href="http://www.cnbtec.com">http://www.cnbtec.com</a>
<b>Language File List</b>	List	Display the list of saved language files.
	Set	Set a language file to the system. Please select a language file from the list and then select Set button to apply the language file to the system. Web Page language will be modified to the set language.
	Del	Delete a language file from the list. Please select a language file from the list and then select Del button to remove from the list. If you delete the currently set language file from the list, then web page language is set to the default language – English.
<b>Log Report</b>	Log List	Display the list of currently saved Log files.
	Load List	Loads up Log Message file stored in the network camera. Log Message file can be sorted by date and index. <b>Click Load List</b> button to view message list in the Log List.
	Logs View	Select a file from the 『Log List』 and click 【Logs View】 button to view.
	Logs Del	Select a file from the 『Log List』 and click 【Logs Del】 button to delete.
	Save Logs	Click [Save Logs] button to save the Log file to PC. The log file is saved to PC as a TARGZIP file format (*.tgz), and it can be also downloadable from the network camera's FTP server.

## 1.9. Configuring Audio

Xnet's Audio features can be configured in this page.

Click [**▶ Audio**] button to open the page shown in Figure 1-9.



**Figure 1-9 Audio Configuration Page**

ITEM		DESCRIPTION
<b>Audio Enable</b>	Enable audio	Enables or Disables Audio feature <Default : Disable>
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.

## 1.10. Configuring Video

XNET's Video features can be configured in this page.

Click [**▶ Video**] button to open the page shown in Figure 1-10.

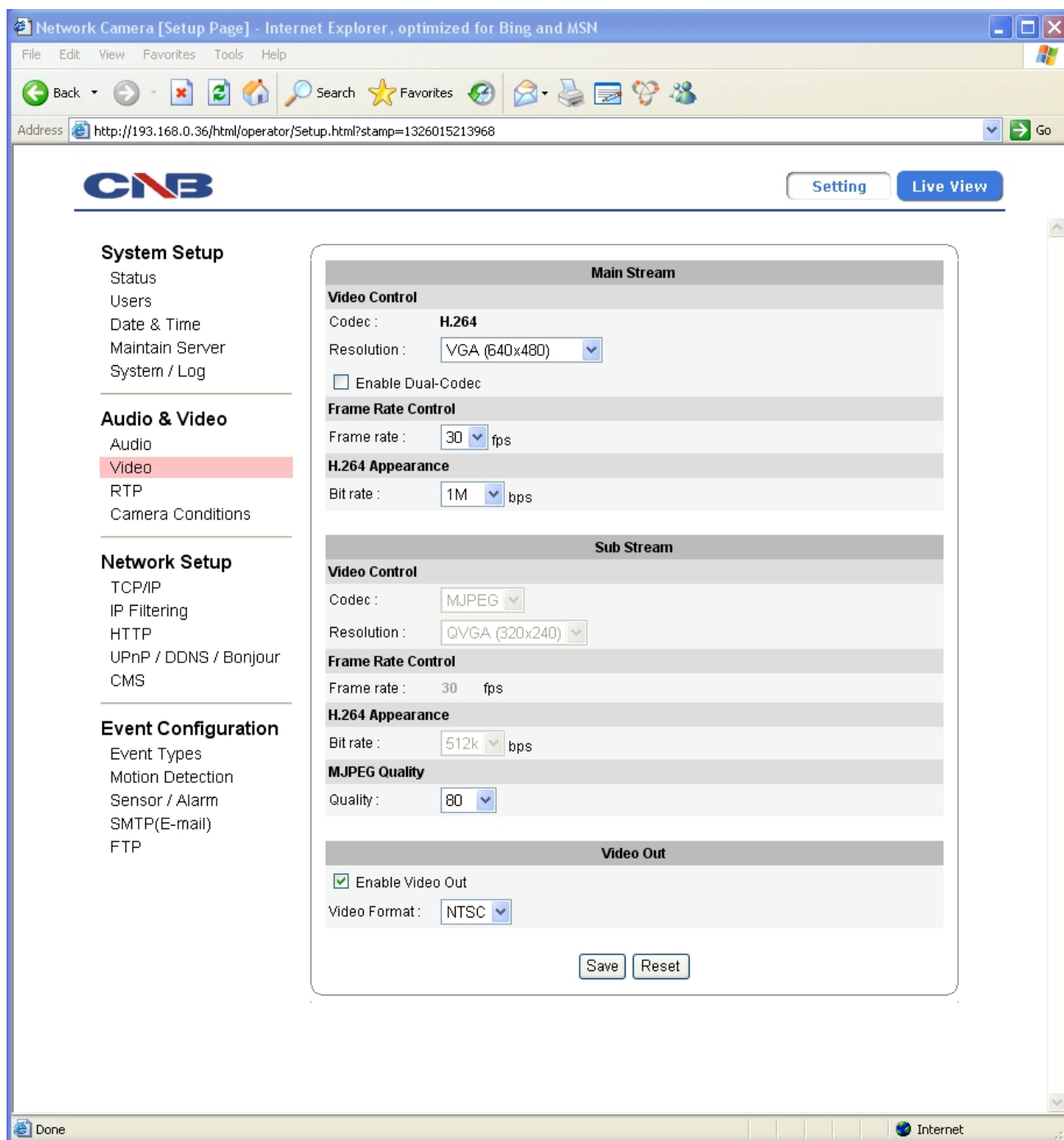


Figure 1-10 Video Configuration Page

ITEM		DESCRIPTION	
Main Stream (H.264)	Resolution	Select a resolution of the video image. Selectable resolutions differ by models like the following: CIF   VGA   D1   720p   SXGA   1080p	
	Enable Dual-Codec	Turns Sub Stream feature on or off. <Default : Disable> Sub Stream output is in H.264 & MJPEG Codec. When configuring, select Main Stream or Sub-Stream in the Live View page. "Enable Dual-Codec checkbox" is enabled when Codec is set up as CIF   VGA   D1   720p	
	Frame rate	Selects Frame rate of Video.	
		Video Type	Frame rate
		NTSC	1, 5, 15, 30
	PAL	1, 5, 12.5, 25	
Quality	Select MJPEG's video quality between 10 and 100.		
Bit rate	Selects bit rate for MPEG4 or H.264 video signal between 384kbps and 5Mbps.		
Sub Stream (H.264 / MJPEG)	Codec	Selects Video Codec.	
		Codec	Resolution
		H.264	QVGA   CIF
		MJPEG	QVGA   CIF   VGA   D1
	Resolution	Select resolution of sub stream video among QVGA   CIF   VGA   D1 depending on Main Stream's resolution and Sub Stream's codec.	
	Frame rate	Sub Stream's frame rate is completely depending on Main Stream's Frame rate, so user can not modify sub stream's frame rate.	
	Bit rate (H.264)	Selects bit rate for sub stream. [CIF]: 64k, 128k, 256k, 386k, 512k [D1]: 128k, 256k, 384k, 512k, 640k, 768k, 896k, 1M	
MJPEG Quality (MJPEG)	Select sub stream video quality between 10 and 100.		
Video Out	Enable Video Out	Turns the Video Out feature on or off. <Note: Video Out is available if Main Stream's resolution is set to 720p or less.>	
	Video Format	Selects Video format at Video Out terminal between NTSC and PAL.<Default : Enable>	
Save	-	Applies and saves changes.	
Reset	-	Recalls previously saved configurations.	

## 1.11. Configuring RTP

RTP / RTSP protocol ports can be configured in this page.

Click [**▶ RTP**] to open the page shown in Figure 1-11.

The screenshot shows the 'Network Camera [Setup Page]' in Internet Explorer. The address bar shows 'http://193.168.0.36/html/operator/Setup.html?stamp=1326015213968'. The page has a sidebar with navigation links: System Setup (Status, Users, Date & Time, Maintain Server, System / Log), Audio & Video (Audio, Video, RTP, Camera Conditions), Network Setup (TCP/IP, IP Filtering, HTTP, UPnP / DDNS / Bonjour, CMS), and Event Configuration (Event Types, Motion Detection, Sensor / Alarm, SMTP(E-mail), FTP). The 'RTP' link is highlighted. The main content area shows the 'RTSP Configuration' section with 'RTSP Port' set to 554. Below it is the 'RTP Configuration' section with 'RTP Start Port' set to 2000, 'RTP End Port' set to 3000, and 'Maximum number of users to connect' set to 10. The 'Multicast Configuration' section has an 'Enable' checkbox, 'TTL Value' set to 5, and two entries for '1st Address' and '2nd Address' (both 224.2.2.104) with their respective ports (49990 and 49994). 'Save' and 'Reset' buttons are at the bottom.

RTSP Configuration	
RTSP Port :	554 [1..65535]

RTP Configuration	
RTP Start Port :	2000 [1024..65435]
RTP End Port :	3000 [1124..65535]
Maximum number of users to connect :	10

Multicast Configuration	
<input type="checkbox"/> Enable	
TTL Value	5 [1..255]
1st Address	224.2.2.104
Port	49990 [1124..65535]
2nd Address	224.2.2.104
Port	49994 [1124..65535]

Save Reset

Figure 1-11 RTP page

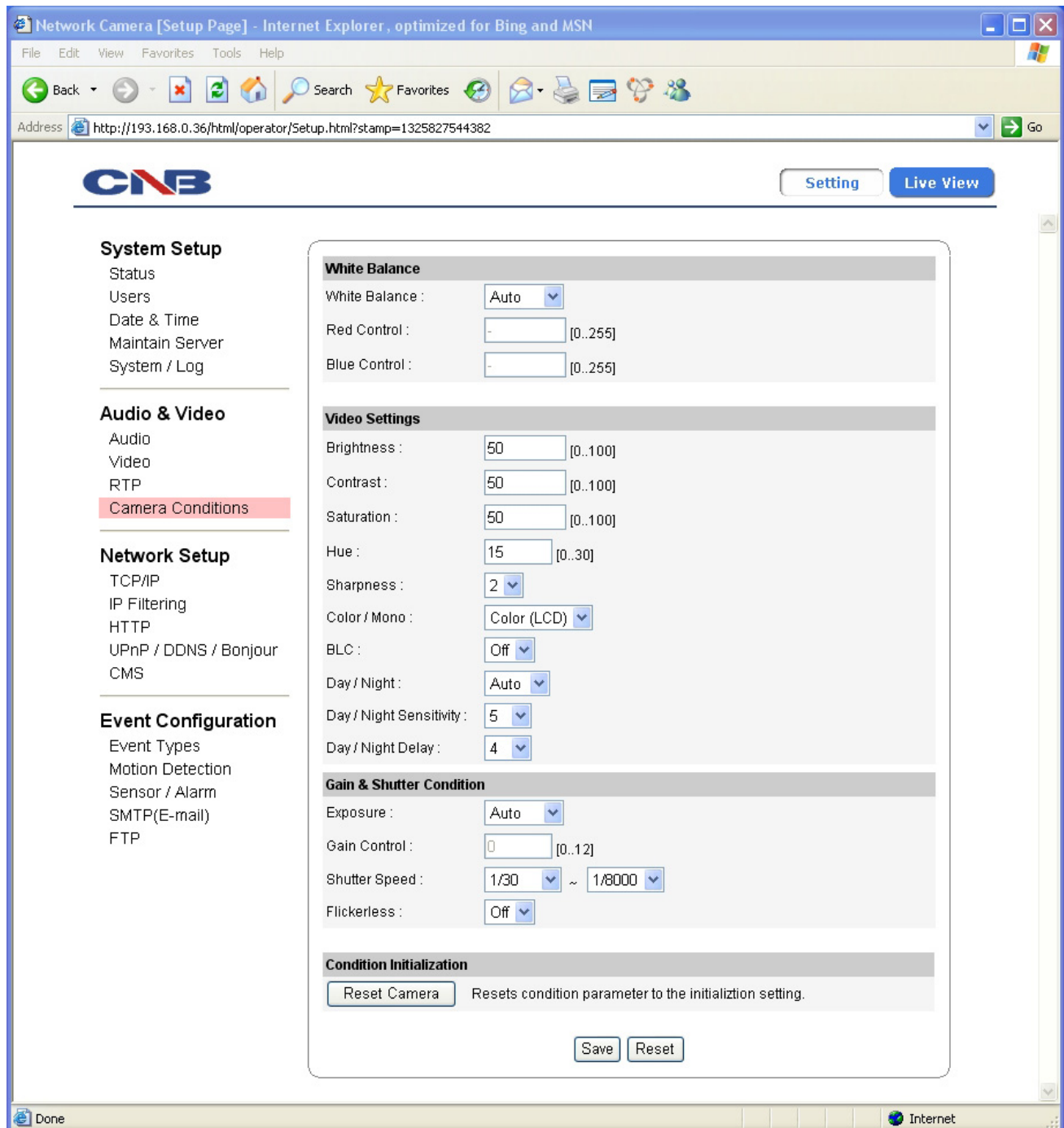
ITEM		DESCRIPTION
<b>RTSP Configuration</b>	RTSP Port	Enter RTSP Port of the Main Stream between 1 and 65535. The default is 554.
<b>RTP Configuration</b>	RTP Start Port	Enter RTP Start Port between 1024 and 65534. The default is 2000. The minimum difference between RTP Start and End Port should be 100.
	RTP End Port	Enter RTP End Port between 1124 and 65535. The default is 3000. The minimum difference between RTP Start and End Port should be 100.
	Maximum number of users to connect	Enter the maximum allowable number of users connected to the Stream between 1 and 10. However, it can be vary depending on Main Stream's Bit Rate. MAX. number of users to connect = 15Mbps / Main Stream's Bit Rate (1<= MAX. number of users to connect <= 10)
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.




## 1.12. Camera Conditions

This is related to camera features of the XNET products.

Click [ ► **Camera Conditions** ] button to open the page shown in Figure 1-12



**Figure 1-12 Camera Conditions Page**

ITEM		DESCRIPTION
<b>White Balance</b>	White Balance	Configures Video's White Balance. White Balance means balancing color temperature by adjusting Red and Blue level. Auto mode will adjust White Balance automatically, while manual mode will adjust white balance level according to manually configured Red and Blue level.
	Red Control	Select Video's Red level between brightness of 0 and 255. This can only be enabled when White Balance is configured as Manual mode.
	Blue Control	Select Video's Blue level between brightness of 0 and 255. This can only be enabled when White Balance is configured as Manual mode.
<b>Video Setting</b>	Brightness	Select Brightness of Video between 0 and 100.
	Contrast	Select Contrast of Video between 0 and 100.
	Saturation	Select Color Saturation of Video between 0 and 100.
	Hue	Select Hue of Video between 0 and 30.
	Sharpness	Select Sharpness of Video between contrast 0 and 5.
	Color/Mono	Selects between Color/Mono of the Video.
	BLC	Turns Back Light Compensation on or off. When enabled, the images will not be saturated even when too much light comes into the Lens.
	Day/Night	Selects between Auto/Day/Night for IR LED.
	Day / Night Sensitivity	Selects a sensitive degree of a CDS sensor for the automatic switch between Day and Night mode.  The camera is easy to switch automatically to the Night mode even though the surroundings are not so dark, as the selected value on this item is larger.
<b>Gain &amp; Shutter Condition</b>	Day/Night Delay	Select the Delay Time for IR LED operation.
	Exposure	Configures Exposure of Video. Exposure means to control brightness of video by adjusting Gain value. In auto mode, Exposure will automatically be adjusted to proper level according to its selected Indoor or Outdoor type. In Manual mode, Exposure will be adjusted to the gain value entered.
	Gain Control	Select Gain level of Video between 0 – 15 only in Manual Exposure mode.
	Shutter Min Speed Control	Configures Camera's Shutter Speed. High Shutter Speed can capture a quick movement accurately, but Video gets noisy while it tries to maintain brightness level properly. Low Shutter Speed reduces Video Noise, but it will not catch quick movement very well. In Manual mode, shutter speed will be configured value. In Auto mode, shutter speed will be changed automatically from highest value to configured value. In Auto mode, we recommend configuring the lowest value.
	Shutter Max Speed Control	Select the Max Speed of Camera Shutter. In Auto mode, shutter speed will be changed automatically from highest value to configured value. In Auto mode, we recommend configuring the lowest value.
<b>Condition Initialization</b>	Flickerless	Select On or Off for reducing Camera's flickering. Depending on Video Out Format (NTSC/PAL), Shutter Min/Max Speed value will be modified.
	Reset Camera	Initializes the Camera's Condition parameters.
	Save	- Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.

### 1.13. Configuring TCP/IP parameters

This configures XNET's network related parameters.


Click [► **TCP/IP**] button to open the page shown in Figure 1-13.

The screenshot displays the 'Network Camera [Setup Page]' in Internet Explorer. The address bar shows 'http://193.168.0.36/html/operator/Setup.html?stamp=1326015213968'. The page features a sidebar with navigation links: System Setup (Status, Users, Date & Time, Maintain Server, System / Log), Audio & Video (Audio, Video, RTP, Camera Conditions), Network Setup (TCP/IP, IP Filtering, HTTP, UPnP / DDNS / Bonjour, CMS), and Event Configuration (Event Types, Motion Detection, Sensor / Alarm, SMTP(E-mail), FTP). The main content area is titled 'Setting' and 'Live View'. It contains several configuration sections:

- IP Address Configuration:**
  - ☒ Obtain an IP Address automatically. (DHCP)
  - ☐ Use the following IP Address :
    - IP Address : 193.168.0.36
    - Subnet Mask : 255.255.255.0
    - Default Gateway : 193.168.0.1
- DNS Configuration:**
  - Primary DNS Server : 168.126.63.1
  - Secondary DNS Server : 168.126.63.2
- NTP Configuration:**
  - NTP Address : time.nist.gov
- Hostname Configuration:**
  - Use the Host Name : XNET
- MAC Address:**
  - MAC Clone : 00 : 1e : 81 : 00 : 01 : 32
  - Reset MAC Addr

At the bottom of the configuration area are 'Save' and 'Reset' buttons.

Figure 1-13 Network Setup Page

ITEM		DESCRIPTION
<b>IP Address Configuration</b>	Obtain an IP Address automatically (DHCP)	<p>Turns DHCP on or off. Check DHCP checkbox to get an IP address automatically from the network using DHCP protocol. Obtained IP address can be viewed by IP Installer.</p> <div>  If the network does not use DHCP server, the product will wait for server's response for two minutes and restart with its previous IP address(192.168.123.100) Please modify Camera's IP address with IP Installer program. </div>
	IP address	Enter an IP address. Configure IP address after checking IP address range configuration of the router where the XNET product is connected.
	Subnet mask	Enter Subnet mask. Use this when you want to access only from the same subnet by masking out upper portion of the IP address. Use 255.255.255.255 when you want to connect from one PC only.
	Default gateway	Enter the address of Default gateway.
<b>DNS Configuration</b>	Primary DNS Server	Enter primary DNS address.
	Secondary DNS Server	Enter secondary DNS address.
<b>NTP Configuration</b>	NTP Address	Enter address of NTP (Network Time Protocol Server.) NTP server is used when "Synchronize to NTP Server" is selected in Date&Time page.
<b>Host name Configuration</b>	User the host name	Enter Host name
<b>MAC Address</b>	MAC Clone	Enter Ethernet Address.
	Reset MAC Address	Initializes the Camera's Ethernet Address.
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.

## 1.14. Configuring IP Filtering

This configures IP Filters for XNET product.

Click [**IP Filtering**] button to open the page shown in Figure 1-14.

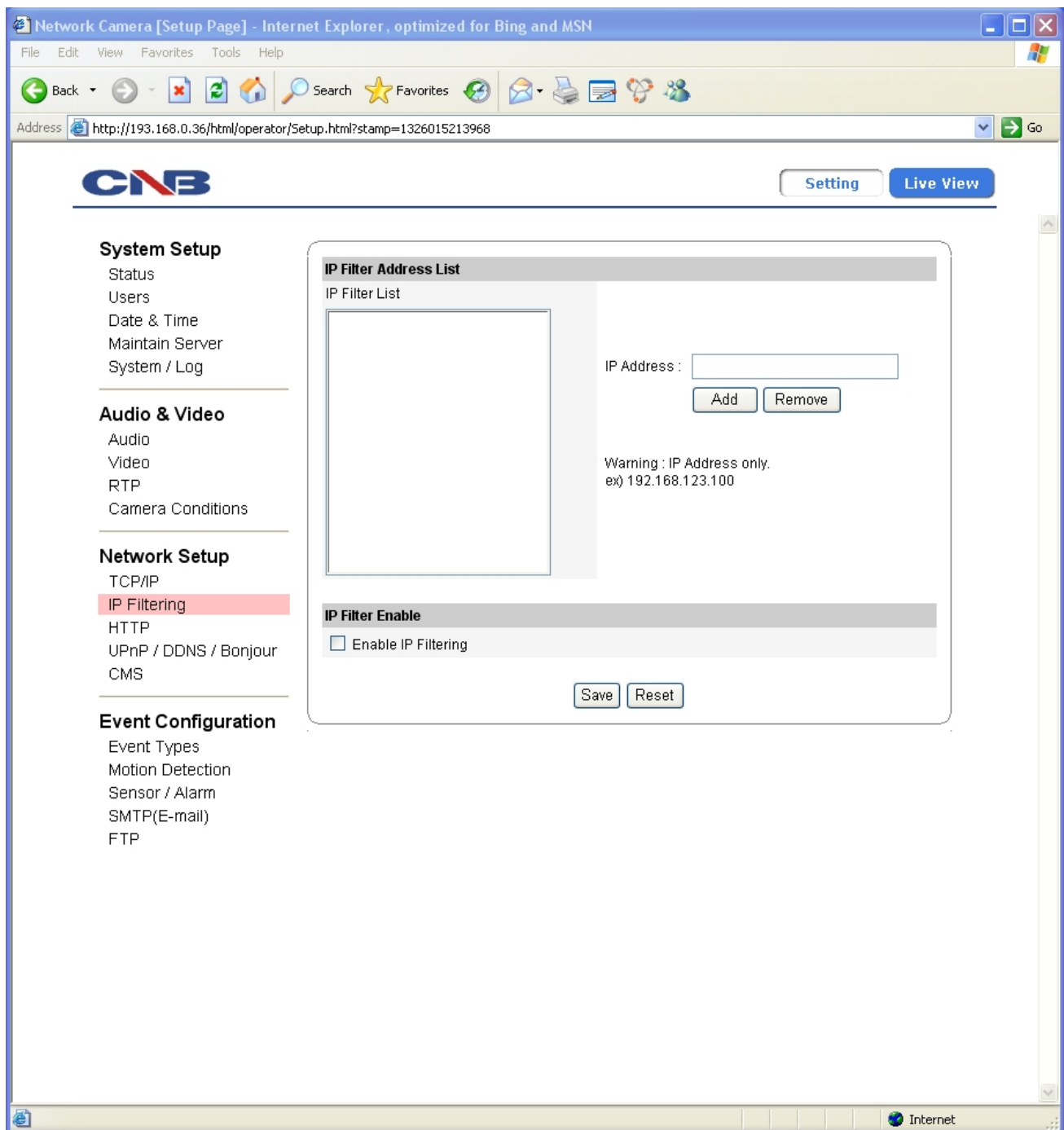


Figure 1-14 IP Filtering Page

ITEM		DESCRIPTION
<b>IP Filter Address List</b>	-	Displays list of currently established IP Filters.
<b>Add</b>	-	<p>Adds an IP address to filter out. Enter the IP Address to block and click add button to add it to IP Filtering listbox. The updated list can be viewed in IP Address Listbox.</p> <ul style="list-style-type: none"> <li>- Up to 20 IP addresses can be added.</li> <li>- Duplicate IP address, Location, Hostname, IP Address, Default Router, Subnet Mask, DNS1, and DNS2 can not be inputted.</li> </ul>
<b>Remove</b>	-	<p>Removes an IP address from IP Filtering listbox. Select the IP address to remove and click Remove button to remove it from the list. The updated list can be viewed in IP Address Listbox.</p>
<b>IP Filter Enable</b>	Enable IP Filtering	<p>Turns the IP Filter on or off. When turned on, XNET product will not be accessed from the IP addresses in IP Filtering Listbox.</p>
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.

## 1.15. Configuring HTTP

This configures HTTP port to access XNET's webpage.

Click [▶ **HTTP**] button to open the page shown in Figure 1-15.

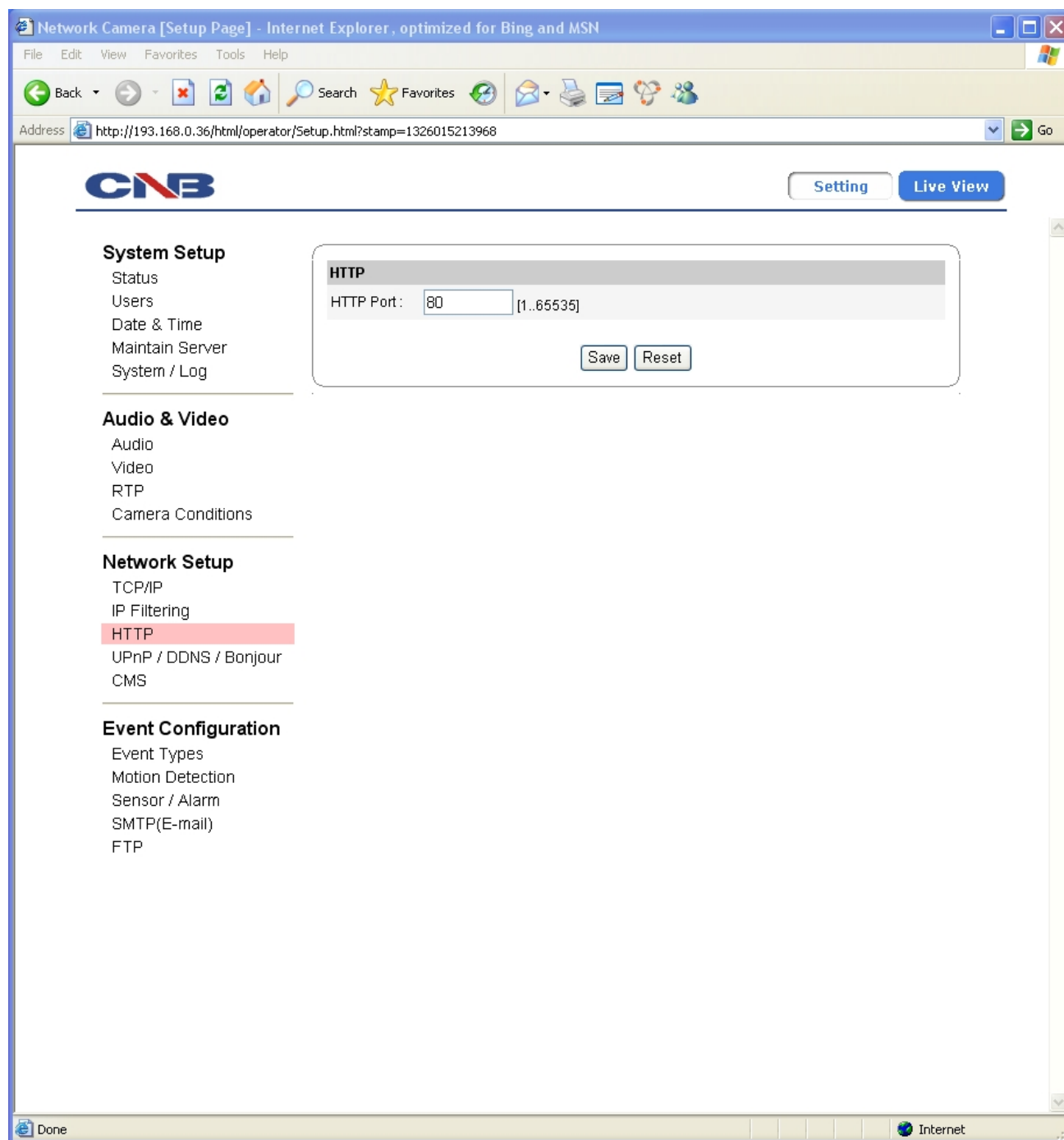


Figure 1-15 HTTP Page

ITEM		DESCRIPTION
<b>HTTP</b>	HTTP port	Enter HTTP Port to access the webpage. Default port is 80, and any other port number has to be entered at the end of the IP address when accessing. (e.g. When using HTTP Port 8080, enter http://192.168.123.100:8080)
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.



## 1.16. Configuring UPnP/DynDNS/Bonjour

UPnP is a protocol for IP installer software. You can enable or disable this UPnP, and you can also use a Friendly Name.

DynDNS configures XNET's DDNS server information.

Click [**▶ UPnP/DynDNS**] to open the page shown in Figure 1-16.

The screenshot shows a web browser window titled "Network Camera [Setup Page] - Internet Explorer, optimized for Bing and MSN". The address bar shows the URL: `http://193.168.0.36/html/operator/Setup.html?stamp=1326015213968`. The page features a sidebar with navigation links under three main categories: System Setup, Audio & Video, and Network Setup. The "UPnP / DDNS / Bonjour" link is highlighted. The main content area is titled "Setting" and "Live View". It contains three sections: UPnP™ Settings, DynDNS Settings, and Bonjour Settings. The UPnP section has a checked "Enable UPnP" checkbox and a "Friendly name" input field. The DynDNS section has unchecked "Enable DynDNS" and "Enable Anonymous" checkboxes, an "Alias host name" input field with a dropdown menu showing "autoipset.com", and "User Name" and "Password" input fields. The Bonjour section has a checked "Enable Bonjour" checkbox and a "Server name" input field. At the bottom of the settings area are "Save" and "Reset" buttons.

**System Setup**

- Status
- Users
- Date & Time
- Maintain Server
- System / Log

**Audio & Video**

- Audio
- Video
- RTP
- Camera Conditions

**Network Setup**

- TCP/IP
- IP Filtering
- HTTP
- UPnP / DDNS / Bonjour**
- CMS

**Event Configuration**

- Event Types
- Motion Detection
- Sensor / Alarm
- SMTP(E-mail)
- FTP

**UPnP™ Settings**

- ☒ Enable UPnP
- Friendly name :

**DynDNS Settings**

- ☐ Enable DynDNS
- ☐ Enable Anonymous
- Alias host name :  autoipset.com
- User Name :
- Password :

**Bonjour Settings**

- ☒ Enable Bonjour
- Server name :

Save Reset

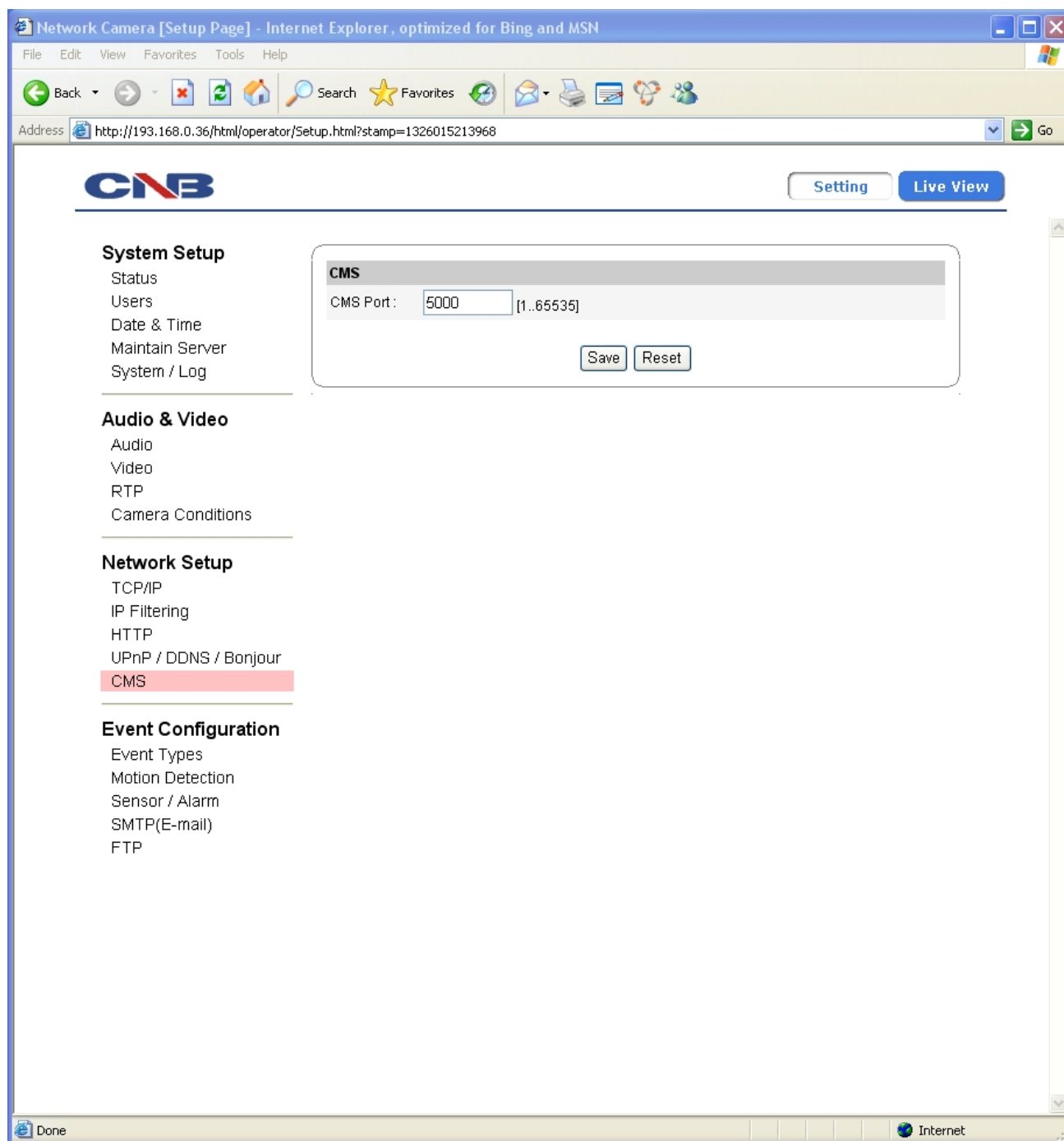
Figure 1-16 UPnP / DynDNS / Bonjour Page

ITEM		DESCRIPTION
<b>UPnP Settings</b>	Enable UPnP	Enables or disables UPnP. When enabled, you can use IP Installer's XNET Auto Search feature.
	Friendly Name	Enter UPnP's Friendly Name.
<b>DynDNS Settings</b>	Enable DynDNS	Enables or disables DynDNS. When enabled, you can automatically obtain a domain from DDNS server by simply registering the XNET product.
	Enable Anonymous	Enables or disables DynDNS Anonymous feature. When enabled, DDNS service is used without going through authentication at Autoipset.com DDNS server. If you want to register a hostname with a specific user account at autoipset.com, please make an account from <a href="http://www.autoipset.com">http://www.autoipset.com</a>
	Alias host name	Enter a Host Name for the DynDNS server. Host Name can not be more than 32 characters when you register it at autoipset.com.
	User name	Enter a user Name for the DynDNS server.
	Password	Enter a password for the DynDNS server.
<b>Bonjour Settings</b>	Enable Bonjour	Enables or disables Bonjour. When enabled, you can use IP Installer's XNET Auto Search feature.
	Server name	Enter Bonjour's Server Name.
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.

## 1.17. Configuring CMS

This configures XNET's CMS Server information.

Click [**► CMS**] to open the page shown in Figure 1-17.



**Figure 1-17 CMS Page**

ITEM		DESCRIPTION
<b>CMS</b>	CMS Port	Enter CMS port number for communication with CMS between 1 and 65535. The default is 5000.
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.

## 1.18. Configuring Event Type

This is related to XNET's DDNS Server information.

Click [**▶ Event Types**] to view page shown in Figure 1-18.

The screenshot shows the 'Event Configuration' page of a Network Camera setup utility. The browser window is titled 'Network Camera [Setup Page] - Internet Explorer, optimized for Bing and MSN'. The address bar shows 'http://193.168.0.36/html/operator/Setup.html?stamp=1326015213968'. The page has a sidebar with navigation links: 'System Setup' (Status, Users, Date & Time, Maintain Server, System / Log), 'Audio & Video' (Audio, Video, RTP, Camera Conditions), 'Network Setup' (TCP/IP, IP Filtering, HTTP, UPnP / DDNS / Bonjour, CMS), and 'Event Configuration' (Event Types, Motion Detection, Sensor / Alarm, SMTP(E-mail), FTP). The 'Event Types' link is highlighted. The main content area is titled 'Event Configuration' and contains several sections: 'Event Enable' with a checkbox 'Enable Event'; 'Event Mode' with checkboxes for 'Sensor' and 'Motion Detection'; 'Event Settings' with 'Capture Format' set to 'JPEG', 'Capture Frame' set to '1' fps, 'Pre-Alarm' set to '2' sec [1..5], and 'Post-Alarm' set to '3' sec [1..8]; 'Event Output' with checkboxes for 'Alarm output port', 'Upload image to FTP [...FTP Setting]', 'Send image to E-mail(SMTP) [...SMTP Setting]', and 'Save image to SD memory'; and a 'View' section with 'Load saved images.' and an 'Open' button, and a 'Port' field set to '21' [1..65535]. At the bottom of the main content area are 'Save' and 'Reset' buttons.

Figure 1-18 Event Types Page

ITEM		DESCRIPTION	
Event Enable	Enable Event	Enables or disables event processing.	
Event Mode	Sensor	Enables or disables the Alarm sensor.	
	Motion Detection	Enables or disables Motion Detection.	
Event Settings	Capture Format	This displays the capture format of images or video for an event recording.	
		Sub Stream Codec	Save as
		H.264	Video
		MJPEG	Image
	Capture Frame	When processing an event, this displays the recording frame rate of image or video.	
		Sub Stream Codec	Recording Frame Rate
		H.264	The same as Sub Stream Frame rate
		MJPEG	1 image per second
	Pre-Alarm	When processing an event, this establishes saving images or video before the occurrence of the event. It can be saved MAX 5 seconds before the event.	
	Post-Alarm	When processing an event, this establishes saving images after the occurrence of the event. It can be saved MAX 8 seconds after the event.	
Event Output	Alarm Output Port	This sends out Alarm signal to its output port during event processing.	
	Upload image to FTP	This allows Alarm images to be uploaded to an FTP server when processing an event. The client PC has to run FTP server to receive the images, and the information of the FTP server has to be accurately entered and saved at the FTP Configuration page.	
	Send Image to Email	This allows Alarm images (Not Video) to be sent out by an e-mail when processing an event. Only one image file at the moment of the event gets sent out. The e-mail address has to be accurately entered and saved at SMTP configuration page.	
Save	-	Applies and saves changes.	
Reset	-	Recalls previously saved configurations.	

## 1.19. Configuring Motion Detection area

This defines areas that detect motion, and up to three different areas can be defined in each channel.

Click Motion button in Operator mode to open the page shown in Figure 1-19.

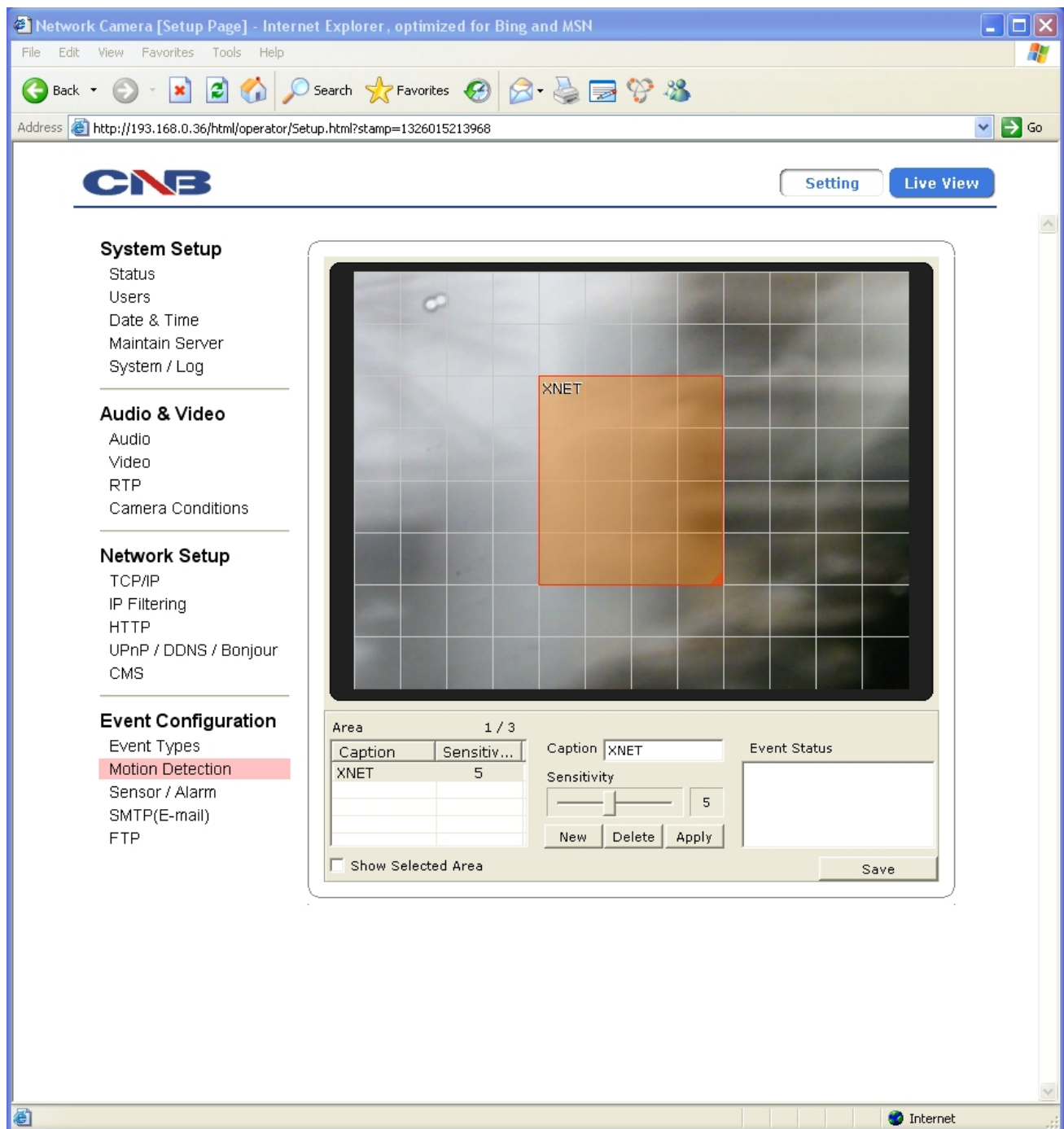


Figure 1-19 Motion Detection Page

ITEM	DESCRIPTION
AREA	Displays currently defined Motion Detection area. When an area is selected from the list, its defined area gets displayed and highlighted in viewer window. Up to 3 motion detection area can be defined.
Show Selected Area	When this is checked, only the selected area gets displayed in viewer window.
Caption	Enter designation for each area.
Sensitivity	Sets sensitivity for detecting motions, "1" being the least sensitive and "10" being the most sensitive. The user needs to configure this according to their applications and circumstances.
Defining Motion Detection Area	<ol style="list-style-type: none"><li>1. Enter a designation in the caption bar, and set sensitivity.</li><li>2. Click "New" button.</li><li>3. A square with the designation you've just defined will appear in viewer window.</li><li>4. The size of the square can be adjusted by clicking and dragging its lower right corner, and the position can be adjusted by dragging the square.</li><li>5. Click "Save" button once you are done defining the areas.</li></ol>

## 1.20. Configuring Sensor/Alarm

This is related to XNET's DDNS server information.

Click [**► Sensor / Alarm**] to open the page shown in Figure 1-20.

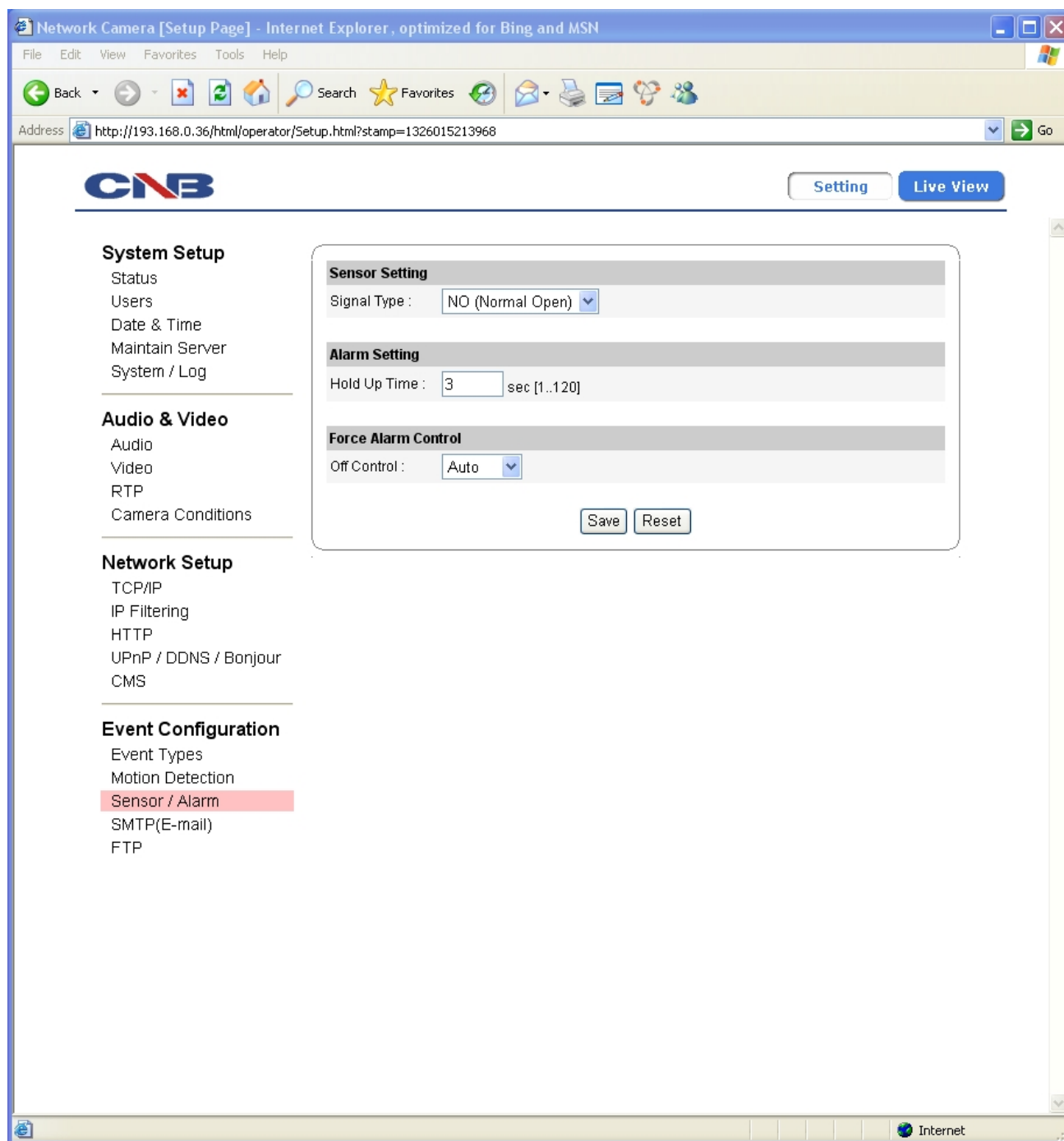


Figure 1-20 Sensor / Alarm Page



ITEM		DESCRIPTION
<b>Sensor Setting</b>	Signal Type	Selects the signal type for Alarm Input Port between Normally Close and Normally Open.
<b>Alarm Setting</b>	Out Interval	Configures interval between repeating Alarm Out signals between 1 and 120 seconds.
<b>Force Alarm Control</b>	Alarm Control	Select the Alarm Control type either Auto or Manual. Auto : Rings the alarm automatically during the out interval depending on the Alarm Input Signal Type. Manual : User can ring or stop the alarm manually using Index page's Alarm button.
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.

## 1.21. SMTP Setup

This configures mailing out method of Alarm Images once 'event' occurred in the XNET system.

Click [▶ **SMTP**] button to open the page shown in Figure 1-21.

Network Camera [Setup Page] - Internet Explorer, optimized for Bing and MSN

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Mail News RSS Feeds

Address <http://193.168.0.36/html/operator/Setup.html?stamp=1326015213968> Go

**CNB** Setting Live View

**System Setup**

- Status
- Users
- Date & Time
- Maintain Server
- System / Log

**Audio & Video**

- Audio
- Video
- RTP
- Camera Conditions

**Network Setup**

- TCP/IP
- IP Filtering
- HTTP
- UPnP / DDNS / Bonjour
- CMS

**Event Configuration**

- Event Types
- Motion Detection
- Sensor / Alarm
- SMTP(E-mail)**
- FTP

**Sender : SMTP Settings**

☐ Enable Internal SMTP Server

☒ Enable SMTP Authorization

Auth Mechanism : AUTO

SMTP Server Name :

SMTP Port : 25 [1..65535]

User Name :

User Password :

**Receiver : E-mail Address Setting**

Email Address 1 :

Email Address 2 :

Email Address 3 :

Save Reset

Figure 1-21 SMTP Page

ITEM		DESCRIPTION
<b>Sender : SMTP Settings</b>	Enable Internal SMTP Server	Turns Internal SMTP Server on or off. When this box is checked, Alarm Image gets mailed out through an internal mail server. Mail Authentication cannot be used in this mode. When this box is unchecked, Alarm Image gets mailed out through an external mail server. Mail Authentication, port, user, password, mail address, etc. needs to be configured.
	Enable SMTP Authorization	Turns External SMTP Server on or off. When this box is checked, user should choose either Login or Plain SMTP Authentication Method.
	SMTP Server Name	Enter the name of external mail server.
	SMTP Port	Enter the port number for the external mail server.
	User name	Enter the user name of the external mail server.
	Password	Enter the password of the external mail server user.
<b>Receiver : E-mail Address Setting</b>	Email Address 1 - 3	Enter the e-mail address of the external mail server user. User can input MAX 3 e-mail addresses
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.

## 1.22. Configuring FTP

This configures how the Alarm Images get sent out using FTP once 'event' occurred in the XNET system.

Click [► **FTP**] button to open the page shown in Figure 1-22.

The screenshot shows a web browser window titled "Network Camera [Setup Page] - Internet Explorer, optimized for Bing and MSN". The address bar shows the URL "http://193.168.0.36/html/operator/Setup.html?stamp=1326015213968". The page features the CNB logo and two buttons: "Setting" and "Live View".

The left sidebar contains a menu with the following categories and items:

- System Setup**
  - Status
  - Users
  - Date & Time
  - Maintain Server
  - System / Log
- Audio & Video**
  - Audio
  - Video
  - RTP
  - Camera Conditions
- Network Setup**
  - TCP/IP
  - IP Filtering
  - HTTP
  - UPnP / DDNS / Bonjour
  - CMS
- Event Configuration**
  - Event Types
  - Motion Detection
  - Sensor / Alarm
  - SMTP(E-mail)
  - FTP** (highlighted in red)

The main content area displays the "FTP Server" configuration section, which includes the following fields and buttons:

- FTP Server**
  - FTP Name :
  - FTP Port :  [1... 65535]
- Login Information**
  - User Name :
  - Password :
- 

Figure 1-22 FTP Page

ITEM		DESCRIPTION
<b>FTP Server</b>	FTP Name	Enter the address of the FTP server to send Alarm Images to in the event processing. The client PC at that IP address has to run the FTP server in order to receive the Alarm Images.
	FTP Port	Enter the port number for the FTP server to send Alarm Images to in the event processing.
<b>Login Information</b>	User Name	Enter the user name of the FTP server to send Alarm Images to in the event processing.
	Password	Enter the password of the FTP server to send Alarm Images to in the event processing.
<b>Save</b>	-	Applies and saves changes.
<b>Reset</b>	-	Recalls previously saved configurations.